```
### Status: Path 1 of [Dialog Information Services via Modem]

### Status: Initializing TCP/IP using (UseTelnetProto 1 ServiceID pto-dialog)
Trying 31060000009999...Open

DIALOG INFORMATION SERVICES
PLEASE LOGON:
 ******** HHHHHHHH SSSSSSSS?
### Status: Signing onto Dialog
 ********
ENTER PASSWORD:
 ******** HHHHHHHH SSSSSSSS? ********
Welcome to DIALOG
### Status: Connected


Dialog level 02.05.06D

Last logoff:  05jun02 14:11:39
Logon file001 07jun02 16:31:45
           *** ANNOUNCEMENT ***
                    ***
--Important Notice for Japanese KMKNET Users
KMKNET will be terminated on 5/31/02. Please
switch to DLGNET. Please refer to the G-Search
home page at http://www.g-search.or.jp
for more information.
                    ***
--SourceOne patents are now delivered to your
email inbox as PDF replacing TIFF delivery.
See HELP SOURCE1 for more information.
                    ***
--Important news for public and academic
libraries.  See HELP LIBRARY for more information.
                    ***
--Important Notice to Freelance Authors--
See HELP FREELANCE for more information
                    ***
For information about the access to file 43 please see Help News43.
***
NEW FILES RELEASED
***AGROProjects (File 235)
***ARCHIVES OF DERMATOLOGY - SUBSCRIBERS (File 787)
***ARCHIVES OF GENERAL PSYCHIATRY -SUBSCRIBERS (File 794)
***ARCHIVES OF INTERNAL MEDICINE - SUBSCRIBERS(File 795)
***ARCHIVES OF NEUROLOGY - SUBSCRIBERS (File 796)
***ARCHIVES OF OPHTHALMOLOGY - SUBSCRIBERS (File 797)
***ARCHIVES OF OTOLARYNGOLOGY - SUBSCRIBERS(File 798)
***ARCHIVES OF PEDIATRIC & ADOLESCENT MEDICINE-
Subscribers (File 789)
***ARCHIVES OF SURGERY - SUBSCRIBERS (File 800)
***JAMA - Journal of the American Medical Association -
   Subscribers (File 785)
***TRADEMARKSCAN-Japan (File 669)
                    ***
UPDATING RESUMED
***Delphes European Business (File 481)
                    ***
RELOADED
***CLAIMS/US PATENTS (Files 340, 341, 942)
***Kompass Western Europe (590)
***D&B - Dun's Market Identifiers  (516)
REMOVED
***Baton Rouge Advocate (File 382)
***Washington Post (File 146)
```

```
 ***Books in Print (File 470)
 ***Court Filings (File 793)
 ***Microcomputer Software Guide Online (File 278)
 ***Publishers, Distributors & Wholesalers of the U.S. (File 450)
 ***State Tax Today (File 791)
 ***Tax Notes Today (File 790)
 ***Worldwide Tax Daily (File 792)

 ***New document supplier***
 IMED has been changed to INFOTRIE (see HELP OINFOTRI)


 >>>Get immediate news with Dialog's First Release
    news service.  First Release updates major newswire
    databases within 15 minutes of transmission over the
    wire.  First Release provides full Dialog searchability
    and full-text features.  To search First Release files in
    OneSearch simply BEGIN FIRST for coverage from Dialog's
    broad spectrum of news wires.
      >>> Enter BEGIN HOMEBASE for Dialog Announcements <<<
      >>>    of new databases, price changes, etc.      <<<
                    ****
KWIC is set to 50.
HILIGHT set on as '*'

File   1:ERIC  1966-2002/Jun 06
       (c) format only 2002 The Dialog Corporation

      Set  Items  Description
      ---  -----  -----------
Cost is in DialUnits
?b 155
       07jun02 16:31:51 User259876 Session D355.1
            $0.32    0.093 DialUnits File1
     $0.32  Estimated cost File1
     $0.01  TELNET
     $0.33  Estimated cost this search
     $0.33  Estimated total session cost   0.093 DialUnits


File 155:MEDLINE(R)  1966-2002/Jun W1
*File 155: Daily alerts are now available. This file has
been reloaded. Accession numbers have changed.

      Set  Items  Description
      ---  -----  -----------
?s (Huntington's (w) disease) and (therapy or treatment)
>>>Warning: unmatched quote found
               0  HUNTINGTON'S
         1319461  DISEASE
               0  HUNTINGTON'S(W)DISEASE
         1837368  THERAPY
         1339212  TREATMENT
      S1       0  (HUNTINGTON'S (W) DISEASE) AND (THERAPY OR TREATMENT)
?s (neurodegenerative (w) disease) and (treatment or therapy)
            8484  NEURODEGENERATIVE
         1319461  DISEASE
            1127  NEURODEGENERATIVE(W)DISEASE
         1339212  TREATMENT
         1837368  THERAPY
      S2     281  (NEURODEGENERATIVE (W) DISEASE) AND (TREATMENT OR
                  THERAPY)
?s s2 and review
             281  S2
          281115  REVIEW
      S3      35  S2 AND REVIEW
```

?s s3 and (Huntington)
35 S3
6016 HUNTINGTON
S4 3 S3 AND (HUNTINGTON)
?t s4/3,k/all

4/3,K/1
DIALOG(R)File 155:MEDLINE(R)

10955559 20516035 PMID: 11060707
Apoptosis modulators in the *therapy* of neurodegenerative diseases.
Deigner H P; Haberkorn U; Kinscherf R
Anatomy and Cell Biology III University of Heidelberg, Germany.
Expert opinion on investigational drugs (ENGLAND) Apr 2000, 9 (4) p747-64, ISSN 1354-3784 Journal Code: 9434197
Document type: Journal Article; Review; Review, Academic
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Apoptosis modulators in the *therapy* of neurodegenerative diseases.
Apoptosis is a prerequisite to model the developing nervous system. However, an increased rate of cell death in the adult nervous system underlies *neurodegenerative* *disease* and is a hallmark of multiple sclerosis (MS) Alzheimer's- (AD), Parkinson- (PD), or *Huntington*'s disease (HD). Cell surface receptors (e.g., CD95/APO-1/Fas; TNF receptor) and their ligands (CD95-L; TNF) as well as evolutionarily conserved...

... protect tyrosine hydroxylase or dopaminergic neurones from apoptosis. Furthermore, peptidergic cerebrolysin has been found to support the survival of neurones in vitro and in vivo. *Treatment* with protease inhibitors are suggested as potential targets to prevent DNA fragmentation in dopaminergic neurones of PD patients. Finally, CRIB (cellular replacement by immunoisolatory biocapsule...

... auspicious gene therapeutical approach for human NGF secretion, which has been shown to protect cholinergic neurones from cell death when implanted in the brain. This *review* summarises and evaluates novel aspects of anti-apoptotic concepts and pharmacological intervention including gene therapeutical approaches currently being proposed or utilised to treat neurodegenerative diseases.
Descriptors: Apoptosis--drug effects--DE; *Neurodegenerative Diseases --drug *therapy*--DT; Anti-Inflammatory Agents, Non-Steroidal--therapeutic use--TU; Cytokines--therapeutic use--TU; Gene *Therapy*; Growth Substances --therapeutic use--TU; Neurodegenerative Diseases--pathology--PA; Neurodegenerative Diseases--physiopathology--PP; Oxidative Stress; Protease Inhibitors--therapeutic use--TU

4/3,K/2
DIALOG(R)File 155:MEDLINE(R)

10398619 99409066 PMID: 10479795
[Transplanted nerve cells survive and are functional for many years]
Transplanterade nervceller lever och fungerar i manga ar.
Bjorklund A; Lindvall O
Wallenberg Neurocentrum, Lunds Universitet.
Lakartidningen (SWEDEN) Aug 11 1999, 96 (32-33) p3407-12, ISSN 0023-7205 Journal Code: 0027707
Document type: Journal Article; Review; Review, Tutorial ; English Abstract
Languages: SWEDISH
Main Citation Owner: NLM
Record type: Completed

During the past decade neuronal grafting has been explored as a novel

approach to the *treatment* of *neurodegenerative* *disease*. About 250 patients with advanced Parkinson's disease and 20-30 patients with *Huntington*'s disease have received embryonic neuronal grafts. The results have shown such grafts to survive and function for many years in the diseased brain, and to induce significant and lasting therapeutic effects. The article gives a *review* of experience in current trials, discussed in the light of the practical and ethical problems that need to be solved in order to develop the neuronal graft technique as a useful and generally acceptable form of *therapy*.
; Cell Survival; Clinical Trials; Ethics, Medical; *Huntington* Disease --surgery--SU; Neurons--physiology--PH; Neurons--transplantation--TR; Neurons--ultrastructure--UL; Parkinson Disease--radionuclide imaging--RI; Swine; Time Factors; Tomography, Emission-Computed; Transplantation, Heterologous

4/3,K/3
DIALOG(R)File 155:MEDLINE(R)

10037042 99021730 PMID: 9804538
Genetic classification of primary *neurodegenerative* *disease*.
Hardy J; Gwinn-Hardy K
Department of Pharmacology, Mayo Clinic Jacksonville, Jacksonville, FL 32224, USA. hardy@mayo.edu
Science (UNITED STATES) Nov 6 1998, 282 (5391) p1075-9, ISSN 0036-8075 Journal Code: 0404511
Document type: Journal Article; Review; Review, Tutorial
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Genetic classification of primary *neurodegenerative* *disease*.
Review During the past 10 years (the "decade of the brain"), some of the genetic causes of many of the primary neurodegenerative diseases, which include Alzheimer's disease, Parkinson's disease, *Huntington*'s disease, amyotrophic lateral sclerosis, prion disease, and many ataxic syndromes, have been found. These breakthroughs mean that for many of these diseases we now...

... final outcome. These diseases have many pathological mechanisms in common, and there may be relatively few pathways to neuronal death seen in these disorders. Thus, *treatment* strategies developed for a particular disease may be found to have efficacy in more than one disorder.
?ds

Set	Items	Description
S1	0	(HUNTINGTON'S (W) DISEASE) AND (THERAPY OR TREATMENT)
S2	281	(NEURODEGENERATIVE (W) DISEASE) AND (TREATMENT OR THERAPY)
S3	35	S2 AND REVIEW
S4	3	S3 AND (HUNTINGTON)

?s s3 and (neurotrophic (w) factor)

	35	S3
	8327	NEUROTROPHIC
	530012	FACTOR
	5284	NEUROTROPHIC(W)FACTOR
S5	2	S3 AND (NEUROTROPHIC (W) FACTOR)

?t s5/3,k/all

5/3,K/1
DIALOG(R)File 155:MEDLINE(R)

10876028 20435204 PMID: 10978846
Glial cell line-derived *neurotrophic* *factor* (GDNF) as a defensive molecule for *neurodegenerative* *disease* : a tribute to the studies of antonia vernadakis on neuronal-glial interactions.
Bohn M C; Kozlowski D A; Connor B

Children's Memorial Institute for Education and Research, Department of Pediatrics, Children's Memorial Hospital, Northwestern University Medical School, Chicago, IL 60613, USA. m-bohn@nwu.edu

International journal of developmental neuroscience : the official journal of the International Society for Developmental Neuroscience (ENGLAND) Nov 2000, 18 (7) p679-84, ISSN 0736-5748 Journal Code: 8401784

Document type: Journal Article; Review; Review, Tutorial

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Glial cell line-derived *neurotrophic* *factor* (GDNF) as a defensive molecule for *neurodegenerative* *disease* : a tribute to the studies of antonia vernadakis on neuronal-glial interactions.

Research stemming from interests in neuronal-glial interactions has led to the identification of a number of novel trophic factors, such as the dopaminergic *neurotrophic* *factor* glial cell line-derived *neurotrophic* *factor* (GDNF). Delivery of the GDNF gene to rat models of Parkinson's disease suggests a potential clinical use of GDNF gene *therapy* for humans with this disease. This *review* article briefly summarizes the history of GDNF and the effects of GDNF gene delivery prior to or after a lesion of the rat nigrostriatal system.

Chemical Name: Nerve Growth Factors; Nerve Tissue Proteins; glial cell-line derived *neurotrophic* *factor*

5/3,K/2

DIALOG(R)File 155:MEDLINE(R)

07969833 94109541 PMID: 8282068

The therapeutic potential of neurotrophic factors in the *treatment* of Parkinson's disease.

Lindsay R M; Altar C A; Cedarbaum J M; Hyman C; Wiegand S J

Regeneron Pharmaceuticals Inc., Tarrytown, New York 10591-6707.

Experimental neurology (UNITED STATES) Nov 1993, 124 (1) p103-18, ISSN 0014-4886 Journal Code: 0370712

Document type: Journal Article; Review; Review, Academic

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

The therapeutic potential of neurotrophic factors in the *treatment* of Parkinson's disease.

...of neurotrophic growth factors, especially members of the nerve growth factor-related neurotrophin family, which may point to their potential as therapeutic agents for the *treatment* of Parkinson's disease. Parkinson's disease, characterized by the progressive loss of dopaminergic neurons of the substantia nigra, is one of the most well...

... yield obvious therapeutic strategies, but even in the absence of such knowledge there are several general approaches that can be taken as strategies for the *treatment* of a "focal" *neurodegenerative* *disease*. These include: (a) mimetics, activation of the postsynaptic target(s) of the missing neurons through mimetics of the missing neurotransmitter, e.g., use of a...

... c) neurotrophic factors or neuroprotectants, intervention with neurotrophic factors/neuroprotective agents which slow, halt, or reverse the progression of neuronal degeneration, e.g., a dopamine *neurotrophic* *factor* in Parkinson's disease. The scope of the present article is limited to a *review* of recent progress in the biology of neurotrophic factors that relates to their potential clinical use in treating the loss of dopamine neurons in Parkinson...

Descriptors: Brain--drug effects--DE; *Growth Substances--therapeutic use --TU; *Nerve Growth Factors--therapeutic use--TU; *Parkinson Disease--drug

```
*therapy*--DT
?ds

Set     Items   Description
S1          0   (HUNTINGTON'S (W) DISEASE) AND (THERAPY OR TREATMENT)
S2        281   (NEURODEGENERATIVE (W) DISEASE) AND (TREATMENT OR THERAPY)
S3         35   S2 AND REVIEW
S4          3   S3 AND (HUNTINGTON)
S5          2   S3 AND (NEUROTROPHIC (W) FACTOR)
?s (neuronal (w) (recruitment or production)) or (neurogenesis)
           95784  NEURONAL
           22599  RECRUITMENT
          279175  PRODUCTION
              70  NEURONAL(W)(RECRUITMENT OR PRODUCTION)
            2520  NEUROGENESIS
      S6    2567  (NEURONAL (W) (RECRUITMENT OR PRODUCTION)) OR
                  (NEUROGENESIS)
?s s6 and (neurotrophic (w) factor)
            2567  S6
            8327  NEUROTROPHIC
          530012  FACTOR
            5284  NEUROTROPHIC(W)FACTOR
      S7      71  S6 AND (NEUROTROPHIC (W) FACTOR)
?s s6 and (neurotrophin)
            2567  S6
            2998  NEUROTROPHIN
      S8      47  S6 AND (NEUROTROPHIN)
?s s7 and ((lateral (w) ventricles) or (ventricular (w) wall))
              71  S7
           99561  LATERAL
           23084  VENTRICLES
            2000  LATERAL(W)VENTRICLES
          152310  VENTRICULAR
          115739  WALL
            4621  VENTRICULAR(W)WALL
      S9       2  S7 AND ((LATERAL (W) VENTRICLES) OR (VENTRICULAR (W)
                  WALL))
?t s9/3,k/all

 9/3,K/1
DIALOG(R)File 155:MEDLINE(R)

11345188   21408168   PMID: 11517261
  Adenoviral brain-derived *neurotrophic* *factor* induces both neostriatal
and olfactory *neuronal* *recruitment* from endogenous progenitor cells in
the adult forebrain.
  Benraiss A; Chmielnicki E; Lerner K; Roh D; Goldman S A
  Department of Neurology and Neuroscience, Cornell University Medical
College, New York, New York 10021, USA.
  Journal of neuroscience : the official journal of the Society for
Neuroscience (United States) Sep 1 2001, 21 (17) p6718-31, ISSN
1529-2401 Journal Code: 8102140
  Contract/Grant No.: P50HL59312; HL; NHLBI; R01NS29813; NS; NINDS;
R01NS33106; NS; NINDS
  Document type: Journal Article
  Languages: ENGLISH
  Main Citation Owner: NLM
  Record type: Completed

  Adenoviral brain-derived *neurotrophic* *factor* induces both neostriatal
and olfactory *neuronal* *recruitment* from endogenous progenitor cells in
the adult forebrain.
  Neural progenitor cells persist throughout the adult forebrain
subependyma, and neurons generated from them respond to brain-derived
*neurotrophic* *factor* (BDNF) with enhanced maturation and survival. To
induce *neurogenesis* from endogenous progenitors, we overexpressed BDNF in
```

the adult ventricular zone by transducing the forebrain ependyma to constitutively express BDNF. We constructed a bicistronic adenovirus...

... CMV) control, and humanized green fluorescent protein (hGFP) under internal ribosomal entry site (IRES) control. This AdCMV:BDNF:IRES:hGFP (AdBDNF) was injected into the *lateral* *ventricles* of adult rats, who were treated for 18 d thereafter with the mitotic marker bromodeoxyuridine (BrdU). Three weeks after injection, BDNF averaged 1 &mgr;g...

... in the CSF of AdBDNF-injected animals but was undetectable in control CSF. In situ hybridization demonstrated BDNF and GFP mRNA expression restricted to the *ventricular* *wall* . In AdBDNF-injected rats, the olfactory bulb exhibited a >2.4-fold increase in the number of BrdU(+)-betaIII-tubulin(+) neurons, confirmed by confocal imaging, relative to AdNull (AdCMV:hGFP) controls. Importantly, AdBDNF-associated *neuronal* *recruitment* to the neostriatum was also noted, with the treatment-induced addition of BrdU(+)-NeuN(+)-betaIII-tubulin(+) neurons to the caudate putamen. Many of these cells...
... in the adult rat brain. The intraventricular delivery of, and ependymal infection by, viral vectors encoding neurotrophic agents may be a feasible strategy for inducing *neurogenesis* from resident progenitor cells in the adult brain.

Descriptors: Brain-Derived *Neurotrophic* *Factor*--administration and dosage--AD; *Neostriatum--drug effects--DE; *Olfactory Bulb--drug effects --DE; *Prosencephalon--drug effects--DE; *Stem Cells--drug effects--DE; Adenoviridae--genetics--GE; Brain-Derived *Neurotrophic* *Factor* --biosynthesis--BI; Brain-Derived *Neurotrophic* *Factor*--genetics--GE; Bromodeoxyuridine; Cell Count; Cell Differentiation--drug effects--DE; Cell Line; Cell Movement--drug effects--DE; Cerebrospinal Fluid--metabolism--ME; Genes, Reporter; Genetic Vectors...

Chemical Name: Brain-Derived *Neurotrophic* *Factor*; Genetic Vectors; Luminescent Proteins; RNA, Messenger; green fluorescent protein; Bromodeoxyuridine

9/3,K/2
DIALOG(R)File 155:MEDLINE(R)

11345187 21408167 PMID: 11517260

Infusion of brain-derived *neurotrophic* *factor* into the lateral ventricle of the adult rat leads to new neurons in the parenchyma of the striatum, septum, thalamus, and hypothalamus.

Pencea V; Bingaman K D; Wiegand S J; Luskin M B
Department of Cell Biology, Emory University School of Medicine, Atlanta, Georgia 30322, USA.

Journal of neuroscience : the official journal of the Society for Neuroscience (United States) Sep 1 2001, 21 (17) p6706-17, ISSN 1529-2401 Journal Code: 8102140
Contract/Grant No.: RO1 DC03190; DC; NIDCD
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Infusion of brain-derived *neurotrophic* *factor* into the lateral ventricle of the adult rat leads to new neurons in the parenchyma of the striatum, septum, thalamus, and hypothalamus.

The findings that brain-derived *neurotrophic* *factor* (BDNF) promotes in vitro the survival and/or differentiation of postnatal subventricular zone (SVZ) progenitor cells and increases in vivo the number of the newly ...

... moreover, in specific parenchymal structures lining the lateral and third ventricles, including the striatum and septum, as well as the thalamus and hypothalamus, in which *neurogenesis* had never been demonstrated previously during adulthood. In each region, newly generated

cells expressed the neuronal marker microtubule-associated protein-2, or neuron-specific tubulin...
Descriptors: Brain-Derived *Neurotrophic* *Factor*--administration and dosage--AD; **Lateral* *Ventricles*--drug effects--DE; *Neurons --drug effects--DE; *Prosencephalon--drug effects--DE...; Corpus Striatum --cytology--CY; Corpus Striatum--drug effects--DE; Corpus Striatum --metabolism--ME; Hypothalamus--cytology--CY; Hypothalamus--drug effects --DE; Hypothalamus--metabolism--ME; Injections, Intraventricular; *Lateral* *Ventricles*--cytology--CY; *Lateral* *Ventricles*--metabolism --ME; Microtubule-Associated Proteins--biosynthesis--BI; Neurons--cytology --CY; Neurons--metabolism--ME; Phenotype; Prosencephalon--cytology--CY; Prosencephalon--metabolism--ME; Rats; Rats, Sprague-Dawley; Receptor...
Chemical Name: Antigens, Differentiation; Brain-Derived *Neurotrophic* *Factor*; Microtubule-Associated Proteins; Bromodeoxyuridine; Receptor, trkB
?ds

Set	Items	Description
S1	0	(HUNTINGTON'S (W) DISEASE) AND (THERAPY OR TREATMENT)
S2	281	(NEURODEGENERATIVE (W) DISEASE) AND (TREATMENT OR THERAPY)
S3	35	S2 AND REVIEW
S4	3	S3 AND (HUNTINGTON)
S5	2	S3 AND (NEUROTROPHIC (W) FACTOR)
S6	2567	(NEURONAL (W) (RECRUITMENT OR PRODUCTION)) OR (NEUROGENESIS)
S7	71	S6 AND (NEUROTROPHIC (W) FACTOR)
S8	47	S6 AND (NEUROTROPHIN)
S9	2	S7 AND ((LATERAL (W) VENTRICLES) OR (VENTRICULAR (W) WALL))

```
?s s8 and ((lateral (w) ventricles) or (ventricular (w) wall))
              47  S8
           99561  LATERAL
           23084  VENTRICLES
            2000  LATERAL(W)VENTRICLES
          152310  VENTRICULAR
          115739  WALL
            4621  VENTRICULAR(W)WALL
     S10       0  S8 AND ((LATERAL (W) VENTRICLES) OR (VENTRICULAR (W)
                  WALL))
?s s7 and (intraventricular)
              71  S7
           20555  INTRAVENTRICULAR
     S11       4  S7 AND (INTRAVENTRICULAR)
?t s11/3,k/all
```

11/3,K/1
DIALOG(R)File 155:MEDLINE(R)

11345188 21408168 PMID: 11517261

Adenoviral brain-derived *neurotrophic* *factor* induces both neostriatal and olfactory *neuronal* *recruitment* from endogenous progenitor cells in the adult forebrain.

Benraiss A; Chmielnicki E; Lerner K; Roh D; Goldman S A
Department of Neurology and Neuroscience, Cornell University Medical College, New York, New York 10021, USA.

Journal of neuroscience : the official journal of the Society for Neuroscience (United States) Sep 1 2001, 21 (17) p6718-31, ISSN 1529-2401 Journal Code: 8102140
Contract/Grant No.: P50HL59312; HL; NHLBI; R01NS29813; NS; NINDS; R01NS33106; NS; NINDS
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Adenoviral brain-derived *neurotrophic* *factor* induces both neostriatal and olfactory *neuronal* *recruitment* from endogenous progenitor cells in

the adult forebrain.

Neural progenitor cells persist throughout the adult forebrain subependyma, and neurons generated from them respond to brain-derived *neurotrophic* *factor* (BDNF) with enhanced maturation and survival. To induce *neurogenesis* from endogenous progenitors, we overexpressed BDNF in the adult ventricular zone by transducing the forebrain ependyma to constitutively express BDNF. We constructed a bicistronic adenovirus...

... 2.4-fold increase in the number of BrdU(+)-betaIII-tubulin(+) neurons, confirmed by confocal imaging, relative to AdNull (AdCMV:hGFP) controls. Importantly, AdBDNF-associated *neuronal* *recruitment* to the neostriatum was also noted, with the treatment-induced addition of BrdU(+)-NeuN(+)-betaIII-tubulin(+) neurons to the caudate putamen. Many of these cells...

... single injection of adenoviral BDNF substantially augmented the recruitment of new neurons into both neurogenic and non-neurogenic sites in the adult rat brain. The *intraventricular* delivery of, and ependymal infection by, viral vectors encoding neurotrophic agents may be a feasible strategy for inducing *neurogenesis* from resident progenitor cells in the adult brain.

Descriptors: Brain-Derived *Neurotrophic* *Factor*--administration and dosage--AD; *Neostriatum--drug effects--DE; *Olfactory Bulb--drug effects --DE; *Prosencephalon--drug effects--DE; *Stem Cells--drug effects--DE; Adenoviridae--genetics--GE; Brain-Derived *Neurotrophic* *Factor* --biosynthesis--BI; Brain-Derived *Neurotrophic* *Factor*--genetics--GE; Bromodeoxyuridine; Cell Count; Cell Differentiation--drug effects--DE; Cell Line; Cell Movement--drug effects--DE; Cerebrospinal Fluid--metabolism--ME; Genes, Reporter; Genetic Vectors--administration and dosage--AD; Genetic Vectors--genetics--GE; Genetic Vectors--metabolism--ME; Immunohistochemist ry; In Situ Hybridization; Injections, *Intraventricular*; Luminescent Proteins--biosynthesis--BI; Luminescent Proteins--genetics--GE; Neostriatu m--cytology--CY; Neostriatum--metabolism--ME; Neurons--cytology--CY; Neurons--drug effects--DE; Neurons--metabolism--ME; Olfactory...

Chemical Name: Brain-Derived *Neurotrophic* *Factor*; Genetic Vectors; Luminescent Proteins; RNA, Messenger; green fluorescent protein; Bromodeoxyuridine

11/3,K/2

DIALOG(R)File 155:MEDLINE(R)

11345187 21408167 PMID: 11517260

Infusion of brain-derived *neurotrophic* *factor* into the lateral ventricle of the adult rat leads to new neurons in the parenchyma of the striatum, septum, thalamus, and hypothalamus.

Pencea V; Bingaman K D; Wiegand S J; Luskin M B

Department of Cell Biology, Emory University School of Medicine, Atlanta, Georgia 30322, USA.

Journal of neuroscience : the official journal of the Society for Neuroscience (United States) Sep 1 2001, 21 (17) p6706-17, ISSN 1529-2401 Journal Code: 8102140

Contract/Grant No.: RO1 DC03190; DC; NIDCD

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Infusion of brain-derived *neurotrophic* *factor* into the lateral ventricle of the adult rat leads to new neurons in the parenchyma of the striatum, septum, thalamus, and hypothalamus.

The findings that brain-derived *neurotrophic* *factor* (BDNF) promotes in vitro the survival and/or differentiation of postnatal subventricular zone (SVZ) progenitor cells and increases in vivo the number of the newly ...

... in other regions of the adult forebrain. We examined the distribution and phenotype of newly generated cells in the adult rat forebrain 16 d after *intraventricular* administration of BDNF in conjunction with the cell proliferation marker bromodeoxyuridine (BrdU) for 12 d. BDNF infusion resulted in numerous BrdU(+) cells, not only in...

... moreover, in specific parenchymal structures lining the lateral and third ventricles, including the striatum and septum, as well as the thalamus and hypothalamus, in which *neurogenesis* had never been demonstrated previously during adulthood. In each region, newly generated cells expressed the neuronal marker microtubule-associated protein-2, or neuron-specific tubulin...

Descriptors: Brain-Derived *Neurotrophic* *Factor*--administration and dosage--AD; *Lateral Ventricles--drug effects--DE; *Neurons--drug effects --DE; *Prosencephalon--drug effects--DE...; DE; Corpus Striatum--cytology --CY; Corpus Striatum--drug effects--DE; Corpus Striatum--metabolism--ME; Hypothalamus--cytology--CY; Hypothalamus--drug effects--DE; Hypothalamus --metabolism--ME; Injections, *Intraventricular*; Lateral Ventricles --cytology--CY; Lateral Ventricles--metabolism--ME; Microtubule-Associated Proteins--biosynthesis--BI; Neurons--cytology--CY; Neurons--metabolism--ME ; Phenotype; Prosencephalon--cytology--CY; Prosencephalon--metabolism...

Chemical Name: Antigens, Differentiation; Brain-Derived *Neurotrophic* *Factor*; Microtubule-Associated Proteins; Bromodeoxyuridine; Receptor, trkB

11/3,K/3
DIALOG(R)File 155:MEDLINE(R)

11331223 21385475 PMID: 11494357

Administration of FGF-2 to embryonic mouse brain induces hydrocephalic brain morphology and aberrant differentiation of neurons in the postnatal cerebral cortex.

Ohmiya M; Fukumitsu H; Nitta A; Nomoto H; Furukawa Y; Furukawa S

Laboratory of Molecular Biology, Gifu Pharmaceutical University, Mitahora-higashi, Gifu 502-8585, Japan.

Journal of neuroscience research (United States) Aug 1 2001, 65 (3) p228-35, ISSN 0360-4012 Journal Code: 7600111

Document type: Journal Article

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

... cell number and cell density of the upper layers (II/III) and the lower layers (IV-VI) of the cerebral cortex were increased. Brain-derived *neurotrophic* *factor* (BDNF), tyrosine hydroxylase, nestin, and microtubule-associated protein 2 were aberrantly or ectopically expressed in the deep areas of the cerebral cortex. A substantial number...

... predominant roles in the proliferation of neuronal precursors and in neuronal differentiation in the developing mouse cerebral cortex even at relatively late stages of brain *neurogenesis*.

; Biological Markers; Brain-Derived *Neurotrophic* *Factor*--analysis--AN ; Cell Differentiation--drug effects--DE; Cell Division--drug effects--DE; Cell Movement; Cerebral Cortex--abnormalities--AB; Cerebral Cortex --embryology--EM; Cerebral Cortex--pathology--PA; Fibroblast Growth Factor 2--administration and dosage--AD; Fibroblast Growth Factor 2--physiology --PH; Gestational Age; Hydrocephalus--pathology--PA; Injections, *Intraventricular*; Intermediate Filament Proteins--analysis--AN; Mice; Mice, Mutant Strains; Microtubule-Associated Proteins--analysis--AN; Nerve Tissue Proteins--analysis--AN; Tyrosine 3-Monooxygenase--analysis--AN

Chemical Name: Biological Markers; Brain-Derived *Neurotrophic* *Factor*; Intermediate Filament Proteins; Microtubule-Associated Proteins; Nerve Tissue Proteins; nestin protein; Fibroblast Growth Factor 2; Tyrosine 3-Monooxygenase

11/3,K/4
DIALOG(R)File 155:MEDLINE(R)

09756110 98182837 PMID: 9522367

Simultaneous expression of brain-derived *neurotrophic* *factor* and neurotrophin-3 in Cajal-Retzius, subplate and ventricular progenitor cells during early development stages of the rat cerebral cortex.

Fukumitsu H; Furukawa Y; Tsusaka M; Kinukawa H; Nitta A; Nomoto H; Mima T ; Furukawa S
Laboratory of Molecular Biology, Gifu Pharmaceutical University, Japan.
Neuroscience (UNITED STATES) May 1998, 84 (1) p115-27, ISSN 0306-4522 Journal Code: 7605074
Document type: Journal Article
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Simultaneous expression of brain-derived *neurotrophic* *factor* and neurotrophin-3 in Cajal-Retzius, subplate and ventricular progenitor cells during early development stages of the rat cerebral cortex.
To identify production sites and action targets of neurotrophins during *neurogenesis* , we investigated immunoreactivities of neurotrophins and their tyrosine kinase receptors in the cerebral cortex of rat embryos. Two sets of ligand-receptor systems, brain-derived *neurotrophic* *factor*/TrkB and neurotrophin-3/TrkC, were expressed simultaneously in Cajal-Retzius, subplate neurons and ventricular multipotent stem cells at embryonic days 13 and 15. *Intraventricular* administration of brain-derived *neurotrophic* *factor* or neurotrophin-3 at embryonic day 16 markedly modulated microtubule-associated protein II and/or Hu protein expression in different ways in the cortical plate cells by embryonic day 20. These observations indicate the involvement of autocrine and/or local paracrine action of brain-derived *neurotrophic* *factor* and/or neurotrophin-3 during formation of the cerebral cortex.
Descriptors: Brain-Derived *Neurotrophic* *Factor*--metabolism--ME; *Cerebral Cortex--embryology--EM; *Embryo--metabolism--ME; *Nerve Growth Factors--metabolism--ME; Aging--metabolism--ME; Brain-Derived *Neurotrophic * *Factor*--pharmacology--PD; Calcium-Binding Protein, Vitamin D-Dependent --metabolism--ME; Cerebral Cortex--drug effects--DE; Cerebral Cortex --metabolism--ME; Embryo--physiology--PH; Fetal Development--physiology...
Chemical Name: Brain-Derived *Neurotrophic* *Factor*; Calcium-Binding Protein, Vitamin D-Dependent; Microtubule-Associated Proteins; Nerve Growth Factors; Nerve Tissue Proteins; Neurotrophin 3; calretinin; Receptor Protein-Tyrosine Kinases
?ds

Set	Items	Description
S1	0	(HUNTINGTON'S (W) DISEASE) AND (THERAPY OR TREATMENT)
S2	281	(NEURODEGENERATIVE (W) DISEASE) AND (TREATMENT OR THERAPY)
S3	35	S2 AND REVIEW
S4	3	S3 AND (HUNTINGTON)
S5	2	S3 AND (NEUROTROPHIC (W) FACTOR)
S6	2567	(NEURONAL (W) (RECRUITMENT OR PRODUCTION)) OR (NEUROGENESIS)
S7	71	S6 AND (NEUROTROPHIC (W) FACTOR)
S8	47	S6 AND (NEUROTROPHIN)
S9	2	S7 AND ((LATERAL (W) VENTRICLES) OR (VENTRICULAR (W) WALL))
S10	0	S8 AND ((LATERAL (W) VENTRICLES) OR (VENTRICULAR (W) WALL))
S11	4	S7 AND (INTRAVENTRICULAR)

?s s7 and (Huntington)

	71	S7
	6016	HUNTINGTON
S12	1	S7 AND (HUNTINGTON)

?t s12/3,k/all

12/3,K/1
DIALOG(R)File 155:MEDLINE(R)

11059938 21063444 PMID: 11119686
Neuroprotective signaling and the aging brain: take away my food and let me run.
Mattson M P
Laboratory of Neurosciences, National Institute on Aging Gerontology Research Center, 5600 Nathan Shock Drive, 21224-6825, Baltimore, MD, USA. mattsonm@grc.nia.nih.gov
Brain research (Netherlands) Dec 15 2000, 886 (1-2) p47-53, ISSN 0006-8993 Journal Code: 0045503
Document type: Journal Article; Review; Review, Tutorial
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

...calorie intake) can increase the resistance of neurons in the brain to dysfunction and death in experimental models of Alzheimer's disease, Parkinson's disease, *Huntington* 's disease and stroke. The mechanism underlying the beneficial effects of dietary restriction involves stimulation of the expression of 'stress proteins' and neurotrophic factors. The...
... manipulation can increase the brain's capacity for plasticity and self-repair. Work in other laboratories suggests that physical and intellectual activity can similarly increase *neurotrophic* *factor* production and *neurogenesis* . Collectively, the available data suggest the that dietary restriction, and physical and mental activity, may reduce both the incidence and severity of neurodegenerative disorders in...
?ds

Set	Items	Description
S1	0	(HUNTINGTON'S (W) DISEASE) AND (THERAPY OR TREATMENT)
S2	281	(NEURODEGENERATIVE (W) DISEASE) AND (TREATMENT OR THERAPY)
S3	35	S2 AND REVIEW
S4	3	S3 AND (HUNTINGTON)
S5	2	S3 AND (NEUROTROPHIC (W) FACTOR)
S6	2567	(NEURONAL (W) (RECRUITMENT OR PRODUCTION)) OR (NEUROGENESIS)
S7	71	S6 AND (NEUROTROPHIC (W) FACTOR)
S8	47	S6 AND (NEUROTROPHIN)
S9	2	S7 AND ((LATERAL (W) VENTRICLES) OR (VENTRICULAR (W) WALL))
S10	0	S8 AND ((LATERAL (W) VENTRICLES) OR (VENTRICULAR (W) WALL))
S11	4	S7 AND (INTRAVENTRICULAR)
S12	1	S7 AND (HUNTINGTON)

```
?s s3 and (BDNF)
              35  S3
            2183  BDNF
     S13       0  S3 AND (BDNF)
?s s3 and (neurotrophin)
              35  S3
            2998  NEUROTROPHIN
     S14       1  S3 AND (NEUROTROPHIN)
?t s14/3,k/all
```

14/3,K/1
DIALOG(R)File 155:MEDLINE(R)

07969833 94109541 PMID: 8282068
The therapeutic potential of neurotrophic factors in the *treatment* of Parkinson's disease.
Lindsay R M; Altar C A; Cedarbaum J M; Hyman C; Wiegand S J
Regeneron Pharmaceuticals Inc., Tarrytown, New York 10591-6707.
Experimental neurology (UNITED STATES) Nov 1993, 124 (1) p103-18, ISSN 0014-4886 Journal Code: 0370712
Document type: Journal Article; Review; Review, Academic

Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

The therapeutic potential of neurotrophic factors in the *treatment* of Parkinson's disease.

... any other human neurodegenerative disorder. This article reviews recent developments in the biology of neurotrophic growth factors, especially members of the nerve growth factor-related *neurotrophin* family, which may point to their potential as therapeutic agents for the *treatment* of Parkinson's disease. Parkinson's disease, characterized by the progressive loss of dopaminergic neurons of the substantia nigra, is one of the most well...

... yield obvious therapeutic strategies, but even in the absence of such knowledge there are several general approaches that can be taken as strategies for the *treatment* of a "focal" *neurodegenerative* *disease*. These include: (a) mimetics, activation of the postsynaptic target(s) of the missing neurons through mimetics of the missing neurotransmitter, e.g., use of a...

... the progression of neuronal degeneration, e.g., a dopamine neurotrophic factor in Parkinson's disease. The scope of the present article is limited to a *review* of recent progress in the biology of neurotrophic factors that relates to their potential clinical use in treating the loss of dopamine neurons in Parkinson...

Descriptors: Brain--drug effects--DE; *Growth Substances--therapeutic use --TU; *Nerve Growth Factors--therapeutic use--TU; *Parkinson Disease--drug *therapy*--DT

```
?ds

Set     Items   Description
S1          0   (HUNTINGTON'S (W) DISEASE) AND (THERAPY OR TREATMENT)
S2        281   (NEURODEGENERATIVE (W) DISEASE) AND (TREATMENT OR THERAPY)
S3         35   S2 AND REVIEW
S4          3   S3 AND (HUNTINGTON)
S5          2   S3 AND (NEUROTROPHIC (W) FACTOR)
S6       2567   (NEURONAL (W) (RECRUITMENT OR PRODUCTION)) OR (NEUROGENESI-
             S)
S7         71   S6 AND (NEUROTROPHIC (W) FACTOR)
S8         47   S6 AND (NEUROTROPHIN)
S9          2   S7 AND ((LATERAL (W) VENTRICLES) OR (VENTRICULAR (W) WALL))
S10         0   S8 AND ((LATERAL (W) VENTRICLES) OR (VENTRICULAR (W) WALL))
S11         4   S7 AND (INTRAVENTRICULAR)
S12         1   S7 AND (HUNTINGTON)
S13         0   S3 AND (BDNF)
S14         1   S3 AND (NEUROTROPHIN)
?s s3 and (gene (w) therapy)
              35  S3
          566485  GENE
         1837368  THERAPY
           18086  GENE(W)THERAPY
    S15        5  S3 AND (GENE (W) THERAPY)
?t s15/3,k/all

 15/3,K/1
DIALOG(R)File 155:MEDLINE(R)

10955559    20516035    PMID: 11060707
  Apoptosis modulators in the *therapy* of neurodegenerative diseases.
  Deigner H P; Haberkorn U; Kinscherf R
  Anatomy and Cell Biology III University of Heidelberg, Germany.
  Expert opinion on investigational drugs (ENGLAND)  Apr 2000,  9  (4)
 p747-64,  ISSN 1354-3784   Journal Code: 9434197
  Document type: Journal Article; Review; Review, Academic
  Languages: ENGLISH
  Main Citation Owner: NLM
```

Record type: Completed

Apoptosis modulators in the *therapy* of neurodegenerative diseases.

Apoptosis is a prerequisite to model the developing nervous system. However, an increased rate of cell death in the adult nervous system underlies *neurodegenerative* *disease* and is a hallmark of multiple sclerosis (MS) Alzheimer's- (AD), Parkinson- (PD), or Huntington's disease (HD). Cell surface receptors (e.g., CD95/APO...

... protect tyrosine hydroxylase or dopaminergic neurones from apoptosis. Furthermore, peptidergic cerebrolysin has been found to support the survival of neurones in vitro and in vivo. *Treatment* with protease inhibitors are suggested as potential targets to prevent DNA fragmentation in dopaminergic neurones of PD patients. Finally, CRIB (cellular replacement by immunoisolatory biocapsule...

... auspicious gene therapeutical approach for human NGF secretion, which has been shown to protect cholinergic neurones from cell death when implanted in the brain. This *review* summarises and evaluates novel aspects of anti-apoptotic concepts and pharmacological intervention including gene therapeutical approaches currently being proposed or utilised to treat neurodegenerative diseases.

Descriptors: Apoptosis--drug effects--DE; *Neurodegenerative Diseases --drug *therapy*--DT; Anti-Inflammatory Agents, Non-Steroidal--therapeutic use--TU; Cytokines--therapeutic use--TU; *Gene* *Therapy*; Growth Substances--therapeutic use--TU; Neurodegenerative Diseases--pathology--PA; Neurodegenerative Diseases--physiopathology--PP; Oxidative Stress; Protease Inhibitors--therapeutic use--TU

15/3,K/2
DIALOG(R)File 155:MEDLINE(R)

10876028 20435204 PMID: 10978846

Glial cell line-derived neurotrophic factor (GDNF) as a defensive molecule for *neurodegenerative* *disease* : a tribute to the studies of antonia vernadakis on neuronal-glial interactions.

Bohn M C; Kozlowski D A; Connor B

Children's Memorial Institute for Education and Research, Department of Pediatrics, Children's Memorial Hospital, Northwestern University Medical School, Chicago, IL 60613, USA. m-bohn@nwu.edu

International journal of developmental neuroscience : the official journal of the International Society for Developmental Neuroscience (ENGLAND) Nov 2000, 18 (7) p679-84, ISSN 0736-5748 Journal Code: 8401784

Document type: Journal Article; Review; Review, Tutorial

Languages: ENGLISH

Main Citation Owner: NLM

Record type: Completed

Glial cell line-derived neurotrophic factor (GDNF) as a defensive molecule for *neurodegenerative* *disease* : a tribute to the studies of antonia vernadakis on neuronal-glial interactions.

... cell line-derived neurotrophic factor (GDNF). Delivery of the GDNF gene to rat models of Parkinson's disease suggests a potential clinical use of GDNF *gene* *therapy* for humans with this disease. This *review* article briefly summarizes the history of GDNF and the effects of GDNF gene delivery prior to or after a lesion of the rat nigrostriatal system.

15/3,K/3
DIALOG(R)File 155:MEDLINE(R)

10484827 20003089 PMID: 10529788

The search for neural progenitor cells: prospects for the *therapy* of *neurodegenerative* *disease*.

Shihabuddin L S; Palmer T D; Gage F H
The Salk Institute for Biological Studies, Laboratory of Genetics, 10010 North Torrey Pines Road, La Jolla, CA 92037, USA. chehabeddine@salk.edu
Molecular medicine today (ENGLAND) Nov 1999, 5 (11) p474-80, ISSN 1357-4310 Journal Code: 9508560
Contract/Grant No.: N01-NS-6-2348; NS; NINDS
Document type: Journal Article; Review; Review, Tutorial
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

The search for neural progenitor cells: prospects for the *therapy* of *neurodegenerative* *disease*.

The etiology of many neurodegenerative diseases has been identified in recent years. *Treatment* of central nervous system (CNS) disease could focus on one or more steps that lead to cell loss. In the past decade, cell *therapy* and/or ex vivo *gene* *therapy* have emerged as possible strategies for the *treatment* of neurodegenerative diseases. The ability to grow CNS-derived neural progenitor cells using growth factors has been extremely useful to study diverse phenomena including lineage...

... diseases. Further identification of the molecules that direct the differentiation of adult neural progenitors may allow their activation in vivo to induce self-repair. This *review* addresses the nature, distribution and regulation of neural stem cells and the potential for applying these cells to both structural CNS repair and *gene* *therapy*.

Descriptors: Neurodegenerative Diseases--*therapy*--TH; *Stem Cells --cytology--CY; Adult; Brain--embryology--EM; Brain --growth and development--GD; Brain Tissue Transplantation; Cell Differentiation; Cell Division; Cell Lineage; Cells, Cultured--transplantation--TR; Fetal Tissue Transplantation; *Gene* *Therapy*--methods--MT; Neurons--cytology--CY; Organ Specificity; Rats; Stem Cells--transplantation--TR

15/3,K/4
DIALOG(R)File 155:MEDLINE(R)

09162002 97071953 PMID: 8914798

Multipotent neural progenitor or stem-like cells may be uniquely suited for *therapy* for some neurodegenerative conditions.

Snyder E Y; Macklis J D
Harvard Medical School, Children's Hospital, Boston, MA, USA.
Clinical neuroscience (New York, N.Y.) (UNITED STATES) 3 (5) p310-6, ISSN 1065-6766 Journal Code: 9315128
Contract/Grant No.: HD28478; HD; NICHD; NS34247; NS; NINDS; NW33852; PHS; +
Document type: Journal Article; Review; Review, Tutorial
Languages: ENGLISH
Main Citation Owner: NLM
Record type: Completed

Multipotent neural progenitor or stem-like cells may be uniquely suited for *therapy* for some neurodegenerative conditions.

... pharmacologic and genetic interventions. The feasibility of this broadly applicable neural stem cell-based strategy has been demonstrated in a number of murine models of *neurodegenerative* *disease*. The focus of this *review* will be our recent observation of a possible tropism of such cells for neurodegenerative environments.

Descriptors: *Gene* *Therapy*--methods--MT; *Nerve Degeneration--genetics --GE; *Neuroglia--transplantation--TR; *Neurons--transplantation--TR; *Stem Cells--transplantation--TR; Brain Ischemia--*therapy*--TH; Hypoxia, Brain--*therapy*--TH; Spinal Cord Diseases--*therapy*--TH

15/3,K/5
DIALOG(R)File 155:MEDLINE(R)